

THREE NEW SPECIES OF DIKRANEURA FROM MEXICO

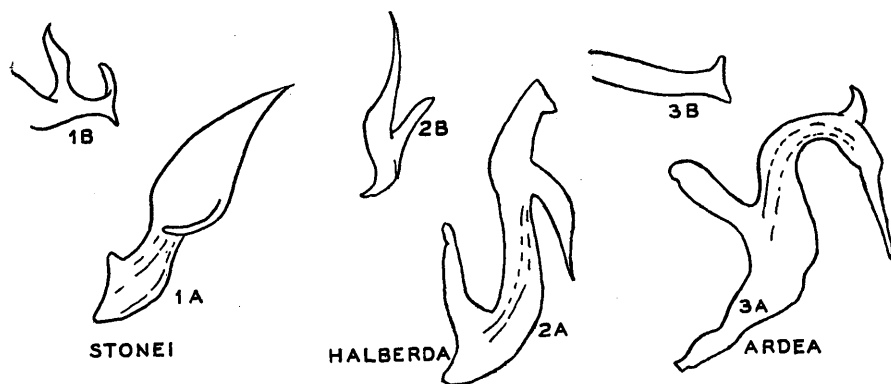
(HOMOPTERA: CICADELLIDAE)

ROBERT F. RUPPEL AND DWIGHT M. DELONG

Department of Zoology and Entomology, The Ohio State University, Columbus 10

Dikraneura is a holarctic genus composed of rather large, slender species separated from the other typhlocybines by having the second apical cell quadrate and the anterior transverse vein proximated to the other transverse veins. The genus is differentiated from its close relatives, *Forcipata* and *Notus*, in lacking the caliper-like plates of the former and the greatly enlarged valve of the latter. The bulk of the New World species are described and figured in the paper of DeLong and Caldwell (1937) and Beamer (1943).

In Mexico, species of the genus are restricted to the pine regions of the higher altitudes. Six species of *Dikraneura* from Mexico have been examined: *arizona* Del. and Cald., *serrata* Del. and Cald., *luna* Del. and Cald., and three new species. These new species are described below.



FIGURES 1-3. 1a—*Dikraneura stonei*—lateral view of aedeagus; 1b—lateral pygofer hook. 2a—*D. halberda*—lateral view of aedeagus; 2b—left pygofer hook. 3a—*D. ardea*—lateral view of aedeagus; 3b—lateral pygofer hook.

Dikraneura stonei n. sp.

Resembling *serrata* Del. and Cald. in general form and appearance, but with unique coloration and genitalia. Length 3.6 mm.

Color: The vertex, pronotum, and scutellum are light yellow, the former two crossed by paired, median, longitudinal, red vittae which extend from the apex of the vertex to the posterior margin of the pronotum. The elytra are translucent golden with a pair of thin, longitudinal red stripes on each clavus, and a broader, brown, longitudinal stripe on each corium. The face is light tan while the venter is a darker tan.

Genitalia: The genital capsule resembles that of *arizona* but the pygofer hooks are broader and each bears a dorsal point near its middle, at its apex, and a ventral point at its apex. The aedeagus is very long, compressed, and recurved; it bears a pair of bifurcate processes near the middle of its ventral margin and a pair of lateral, reflexed processes at its apex.

Holotype male collected at Mexico, Cuernavaca Rd., Mex., Aug. 20, 1936 by Ball and Stone. Type in the U.S.N.M.

Dikraneura halberda n. sp.

Resembling *serrata* DeLong and Caldwell and *stonei* in general appearance but with distinctive genitalia. Length 4.1 mm.

Color: The vertex, pronotum, and scutellum are cream. A pair of broad longitudinal, red vittae extend from the apex of vertex to the scutellum. The elytra are hyaline with a pair of longitudinal stripes on each clavus and the areas between the bases of the sectors orange-red. The face and venter are immaculate cream.

Genitalia: The pygofer hooks are broad at their bases, taper to sharp apices, and bear meso-anteriorly directed processes on their mesal faces. The phallicata is strongly compressed and bears a short strongly-curved process at its apex, a pair of short flap-like ventro-lateral processes near its apex, and a pair of appressed ventrally-directed spindle-shaped processes near the middle of its ventral margins.

Holotype male and male paratypes collected at Mexico, D. F., Sept. 13, 1939 by D. M. DeLong; male paratype Orizaba, V. C., Oct. 17, 1941, DeLong, Good, Caldwell, and Plummer; male paratypes Desierto de los Leones, D. F., Jan. 8, 1933 (MF 2913) Dampf; male paratypes Chapultepec Hts., D. F., Nov. 16, 1926 (MB 150), Dampf. Types in the DeLong collections.

Dikraneura ardea n. sp.

Resembling *halderda* in general form and appearance but with distinctive male genital structures. Length 4.2 mm.

Color: The vertex, pronotum, and scutellum are cream crossed by a pair of longitudinal red vittae which extend from the apex of the vertex to the scutellum. A median, fine, red line extends longitudinally across the pronotum. The elytra are hyaline with a pair of stripes on each clavus and lines on each corium red. The face and venter are immaculate cream.

Genitalia: Genital capsule, styles, and connective similar to *halberda*. The pygofer hook is nearly parallel-sided and terminates in a foot-shaped apical process. The base of the aedeagus is elongate with the dorsal processes arising remote from the articulation with the connective. The phallicata is slender and reflexed and bears a dorsal pre-apical spine-like process and a pair of slender, lateral-apical processes.

Holotype male collected at Zamora, Mich., Oct. 2, 1941 by DeLong, Good, Caldwell, and Plummer. Type in the DeLong collection.

LITERATURE CITED

- Beamer, R. H. 1943. Notes and descriptions of some species of *Dikraneura* (Homoptera: Cicadellidae). Jour. Kansas Ent. Soc., 16: 54-63.
DeLong, D. M., and J. S. Caldwell. 1937. The genus *Dikraneura*—A study of the male genitalia—With descriptions of new species. Proc. Ent. Soc. Washington, 39: 17-34.
-